

F1
an impedance monitor device coupled to the multiple antenna ablation device;
an antenna advancement member coupled to the three or more antennas and sufficiently rigid
to move in a linear direction along the longitudinal axis of the trocar to simultaneously advance the
three or more antennas from the trocar; and
at least one cable coupled to the multiple antenna ablation device.

16. (Amended) The apparatus of claim 1, wherein the multiple antenna ablation device is adapted to operate[s] in a monopolar mode.

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17. (Amended) The apparatus of claim 1, wherein the multiple antenna ablation device is adapted to operate[s] in a bipolar mode.

18. (Amended) The apparatus of claim 1, wherein the apparatus is adapted to be switchable between bipolar and monopolar operation.

Sub 62
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27. (Amended) An ablation treatment apparatus, comprising:
an electromagnetic energy source;
a trocar including a distal end, and a hollow lumen extending along a longitudinal axis of the trocar;
a multiple antenna ablation device including a plurality of antennas positionable in the trocar lumen and deployable from the trocar lumen in a lateral direction relative to the longitudinal axis at a selected tissue mass, wherein the plurality of antennas includes a sufficient number of antennas to create an ablation volume between the antennas in the selected tissue site without impeding out the plurality of antennas when 5 to 200 watts of electromagnetic energy is delivered from the electromagnetic energy source to the plurality of antennas;
a movable insulation sleeve disposed over at least a portion of one of an antenna or the trocar, the insulation sleeve configured to vary a length of an energy delivery surface; and
at least one cable coupling the multiple antenna ablation device to the electromagnetic energy source

33. (Amended) The apparatus of claim 32, wherein the multiple antenna ablation device is adapted to operate[s] in a monopolar mode.

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34. (Amended) The apparatus of claim 32, wherein the multiple antenna ablation device is adapted to operate[s] in a bipolar mode.

F4 35. (Amended) The apparatus of claim 32, wherein the multiple antenna ablation device is adapted to be switchable between bipolar and monopolar operation.

36. (Amended) A method for creating a volumetric ablation in a selected tissue mass, comprising:

providing a multiple antenna ablation apparatus including a trocar with a trocar lumen and a trocar tissue piercing distal end, a plurality of antennas deployable from the lumen, an antenna advancement member, a movable insulation sleeve disposed over at least a portion of one of an antenna or the trocar and an electromagnetic energy source coupled to the plurality of antennas; inserting the trocar into the selected tissue mass with the plurality of antennas positioned in the trocar lumen;

moving the antenna advancement member [to] in a linear direction relative to a longitudinal axis of trocar to simultaneously advance the plurality of antennas with curvature from the trocar lumen in a lateral direction relative to a longitudinal axis of the trocar into the selected tissue mass;

delivering 5 to 200 watts of electromagnetic energy from the electromagnetic energy source to the plurality of antennas without impeding out an antenna of the plurality of antennas;

detecting impedance; and

creating the volumetric ablation in the selected tissue mass.

F5 37. (Amended) The method of claim 36, wherein 5 to 100 watts of electromagnetic energy [source] is delivered to the plurality of antennas without impeding out an antenna of the plurality of antennas.

38. (Amended) The method of claim 36, wherein 5 to 75 watts of electromagnetic energy [source] is delivered to the plurality of antennas without impeding out an antenna of the plurality of antennas.

39. (Amended) The method of claim 36, wherein 5 to 50 watts of electromagnetic energy [source] is delivered to the plurality of antennas without impeding out an antenna of the plurality of antennas.

Please add the following new claims:

45. An ablation treatment apparatus, comprising:

a trocar including a tissue piercing distal end; and a hollow lumen extending along a longitudinal axis of the trocar;

a multiple antenna ablation device configured to be coupled to an electromagnetic energy source, the multiple antenna ablation device including three or more antennas positionable in the lumen and deployable from the trocar lumen with curvature in a lateral direction relative to the longitudinal axis at a selected tissue mass, each of a deployed antenna having an electromagnetic energy delivery surface configured to create a volumetric ablation between the deployed antennas without impeding out the deployed antenna when 5 to 200 watts of electromagnetic energy is delivered from the electromagnetic energy source to the multiple antenna ablation device, at least one of the antenna having a sensing portion.

an impedance monitor device coupled to the multiple antenna ablation device, wherein the impedance monitoring device and multiple antenna ablation device can determine a property of a tumor;

an antenna advancement member coupled to the three or more antennas; and

at least one cable coupled to the multiple antenna ablation device.

46. The apparatus of claim 45, wherein the property is one of a dimensional property, a tumor periphery or an impedance.

REMARKS

Objections under 35 U.S.C. §132

The Examiner objects to Applicants previous amendment to the specification under §132 as disclosing new matter, and requires cancellation of matter not supported in the specification. Office action mailed 6/1/00, page 1, paragraph 3. Applicant has amended the specification to overcome this rejection.

Rejections under 35 U.S.C. §112

Claims 16-18, 33-35, and 37-39 are rejected under §112, first paragraph, as indefinite. The examiner states that claims 16-18 and 33-35 recite the device is used in either a bipolar or a monopolar